

REMARKS

Claims 1-23 currently remain in the application. Claims 1-5, 9-10, 13, 17 and 20-21 have been amended. Claims 22-23 have been added. No new matter has been added. Applicant respectfully requests reconsideration in view of the preceding amendments and following remarks.

The present invention creates and stores a timestamp that preserves the timing relationship of data in a bitstream as it appeared before any processing that introduces jitter. The data is then processed and jitter added. By storing the original timing relationship, before any jitter inducing processing, the present invention allows for recreation of the data with its original timing.

The claims have been amended to clarify the present invention. Claim 1, for example, has been amended and now recites "a processing apparatus configured to a) process the data in the bitstream portion in a manner that introduces jitter in the data and b) create a timestamp including timing information that describes the timing relationship of the data as the data was received" and "a second communication interface configured to transmit an output bitstream onto a channel, the output bitstream including the timestamp and the data including jitter introduced by the processing apparatus". No new matter has been added. Support for this amendment can be found throughout the Specification, and in particular on page 4, line 20 to page 8, line 2, and page 10, line 3 to page 13, line 8. The remaining amendments are also supported by the Specification. For example, support for amended claim 4 can be found in the Specification on page 5, line 25 to page 6, line 13.

Rejection under 35 U.S.C. § 102

The Examiner rejected claims 1-7, 9-14 and 17-21 under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,640,388 to Woodhead et al. (referred to herein as 'Woodhead').

Woodhead describes a system that removes jitter prior to reception of packets at a reception site. The system of Woodhead achieves this goal by intercepting packets at an

intermediate site between the transmission site and reception site, adjusting timestamp values at the intermediate site, employing a local clock at the intermediate site that operates at a nominal frequency substantially equal to the frequency of the transmission site clock, using that clock as a jitter free clock to correct packet timing resulting from transmission, and outputting packets from a buffer at a controlled rate for reception at the reception site.

The system of Woodhead is conceptually opposite to the present invention. The present invention introduces jitter and transmits the data with jitter and a timestamp that lets a receiving site rebuild the jitter loaded data. Quite oppositely, Woodhead's intermediate transmission system removes jitter so a receiving site does not have to handle any jitter.

The claims underscore these conceptual differences. For example, amended claim one now recites "a processing apparatus configured to a) process the data in the bitstream portion in a manner that introduces jitter in the data and b) create a timestamp including timing information that describes the timing relationship of the data as the data was received". Woodhead does not teach such a processing apparatus. Quite oppositely, his processing apparatus purges jitter from received data. The jitter of Woodhead is generated during transmission. In addition, Woodhead aims to eliminate temporal inaccuracies from the data as received. In other words, Woodhead presumes the incoming data includes transmission jitter and wants to rid the system of erroneous temporal relationships in the data as it was received. Thus, he does not teach creating timing information that describes the timing relationship of the data as it was received, as recited.

Claim 1 also recites "a second communication interface configured to transmit an output bitstream ... including the timestamp and the data including jitter introduced by the processing apparatus". It is respectfully submitted that the art of record does not teach such a limitation.

Independent claims 9, 20 and 22 include limitations that are similar to independent claim 1 and are patentable for at least the reasons described above.

Therefore, Applicants respectfully submits that Woodhead does not teach or suggest independent claims 1, 9, 20 and 22, and that the independent claims are allowable.

Claims 2-7 and 10-14, 17-19, 21 and 23 each depend either directly or indirectly from independent claims 1, 9, 20 and 22 and are patentable over the art of record for at least the reasons set forth above with respect to the independent claims. For example, depending claim 7 recites "to replace a synchronization byte in the bitstream with a new synchronization byte, the new synchronization byte signalling the beginning of payload data for a payload portion of the bitstream". As mentioned in the Specification on page 11, the timing information, when

embedded in a bitstream, must be done in such a way to avoid payload emulation. As falsely emulated payload may cause decoding or stream synchronization errors, the present invention replaces any existing synchronization bytes that may lead to payload emulation problems with a new synchronizing byte to signal the beginning of payload. The Office Action points to a section of Woodhead that describes a PCR timestamp, which may still produce payload emulation problems and thus does not anticipate dependent claim 7.

Withdrawal of the rejection of under 35 U.S.C. § 102(b) is therefore respectfully requested.

Rejection under 35 U.S.C. § 103

The Examiner rejected claims 8, 15 and 16 under 35 U.S.C. 103(a) as being unpatentable over Woodhead in view of US Patent No. 6,323,789 to Lawrence et al. (referred to herein as 'Lawrence').

Applicants contest the use of Woodhead in any obviousness-type rejection of the present invention. Woodhead teaches against the present invention. At a high level, Woodhead eliminates jitter. The present invention adds jitter. Studying the details of Woodhead provides numerous instances that teach against the present invention. A reference must be taken in its entirety, including those portions that teach away from the claims and argue against obviousness (MPEP 2141.02). Woodhead cannot be extended to reject a jitter creating system when the goal of his invention is jitter elimination.

In addition, claims 8, 15 and 16 each depend either directly or indirectly from independent claims 1 and 9 and are patentable over the art of record for at least the reasons set forth above with respect to the independent claims.

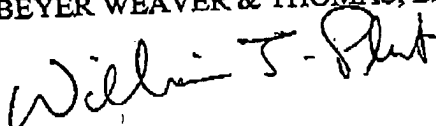
Withdrawal of the rejection of under 35 U.S.C. § 103(a) is therefore respectfully requested.

Applicants believe that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Applicants hereby petition for an extension of time which may be required to maintain the pendency of this case, and any required fee for such extension or any further fee required in connection with the filing of this Response is to be charged to Deposit Account No. 50-0388 (Order No. CISCP210).

Respectfully submitted,

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Limited Recognition under 37 C.F.R. §10.9(b)

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Expires: April 21, 2005


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